

Taxonomy of tropical West African bivalves

I. Four new species of eulamellibranchiate bivalves

by Rudo VON COSEL

Abstract. — New marine eulamellibranchiate bivalves from tropical West Africa are described : *Lucina leloeuffi* n. sp. (Lucinidae) from circalittoral muddy bottom, *Anodontia subrostrata* n. sp. (Lucinidae) from infralittoral sandy-muddy bottom, *Solecortus afroccidentalis* n. sp. (Solecortidae), hitherto confounded with the mediterranean *S. strigilatus*, and *Dosinia gabonensis* n. sp. (Veneridae), hitherto confounded with the european *D. exoleta*.

Résumé. — Description d'eulamellibranches nouveaux de l'Afrique Occidentale tropicale : *Lucina leloeuffi* n. sp. (Lucinidae) des fonds vaseux circalittoraux, *Anodontia subrostrata* n. sp. (Lucinidae) des fonds sablo-vaseux infralittoraux, *Solecortus afroccidentalis* n. sp. (Solecortidae), jusqu'ici confondu avec l'espèce méditerranéenne, *S. strigilatus*, et *Dosinia gabonensis* n. sp. (Veneridae), jusqu'ici confondue avec l'espèce européenne *D. exoleta*.

R. VON COSEL, Marine biologist at ORSTOM, Laboratoire de Biologie des Invertébrés marins et Malacologie, Muséum national d'Histoire naturelle, 55, rue Buffon, F-75005 Paris.

The marine mollusc fauna of Tropical West Africa is in comparison with those of other tropical regions still very little known especially among the bivalves. This is illustrated by the fact that between 1950 and 1986, 24 new species of large size have been described. I have been working on the extensive collection of West African marine bivalves in the Paris Museum originating from several marine expeditions on research vessels or fishing boats, as well as from shore collecting, in order to prepare an identification guide. Several species still could not be identified with known taxa. The purpose of this series of papers is to present descriptions of the new taxa, as well as a taxonomical updating of others. The present paper contains the description of two new lucinids, one solecortid and one venerid.

Family LUCINIDAE

Lucina leloeuffi n. sp.

TYPE MATERIAL : Holotype MNHN, 55,3 × 46,4 mm, off Cap des Palmes, E-Liberia, 250 m, dredged, grey mud with fine sand and shell debris, a left v., leg. LE LOEUFF, 13.X.1971. Paratypes : same locality, 2 left v., 54,3 × 46,6 mm ; 56,5 × 45,0 mm, MNHN.

TYPE LOCALITY : Cap des Palmes, E-Liberia, approximately 4°10' N/7°40' W.

DESCRIPTION

Shell medium-sized, solid, more or less compressed, subcircular, longer than high (length-width ratio 1,2 : 1), inequilateral. Beaks situated at or just behind the anterior third of the valve. Valves anteriorly conspicuously pointed, posteriorly broad, rounded and at the end truncated and concave where the broad and well developed radial ridge on the posterior slope reaches the margin. Ligament narrow, extending over the middle third of the valve. Lunule small but well marked.

Outside with 10-15 conspicuous, prominent, thin, raised and widely spaced concentric lamellae : 15 in the holotype, 10 and 14 in the paratypes. Interspaces smooth, with concentric growth markings. Ventral extension of anterior adductor scar very small and separated from the pallial line. Hinge typically lucinid, with two small cardinals and two well developed laterals in the left valve. Ventral margin of the studied specimens not visibly crenulated.

Colour of valves dull white, concentrically marked with light grey. Periostracum thin, light brownish, peeling off over the largest part of the valve.

DISTRIBUTION : At the border between Liberia and Ivory Coast, only known from the type locality.

MATERIAL EXAMINED : The type material.

BIOTOPE : Unknown, most probably mud in deeper water around 200-300 m.

DERIVATIO NOMINIS : This species is named after my colleague P. LEOUEFF, who dredged extensively off the Ivory Coast and who collected the type material.

REMARKS

This new lucinid resembles *L. reyrei* (Nicklès, 1955), which has a similar outline and prominent and widely-spaced lamellae, but only reaches one fourth of the size of *L. leloeffi*. *L. reyrei* cannot however, be a juvenile of the new species because it has 12-15 concentric lamellae already at a size of 10-12 mm, whereas juveniles of *L. leloeffi* of the same size have only 3-5 lamellae which are more widely spaced. The anterior end of *L. reyrei* is slightly less pointed, the postero-dorsal slope is more abruptly truncated, and the ventral extension of the anterior adductor scar is slightly larger in comparison to shell size. There is a minute crenulation of the ventral margin in certain specimens of *L. reyrei*, which is missing in other specimens. Another comparable species is *L. orbicularis* Deshayes, 1836, from the Pliocene of Southern Europe (for illustration see SACCO, 1901), which is also small and closely resembles *L. reyrei*. *L. sublamellata* (Sacco, 1901) was described as a variety of *L. orbicularis* from the North Italian Pliocene and occurs also in the Pliocene of Tunisia (FEKH, 1975, as "*L. orbicularis* Desh."). It is in fact a distinct species which has the same size as *L. reyrei*, is more oblique and has more crowded concentric lamellae.

Anodontia subrostrata n. sp.

TYPE MATERIAL : Holotype MNHN, 11,8 × 10,0 mm, off Libreville, Gabon, 0°25' N/9°00' E, 73 m, muddy sand with shell debris, a left v., "Calypso" Golfe de Guinée sta. 45, 8.VI.1956. Paratypes : same locality, 10,0 × 8,5 mm, a right v.; 8,2 × 7,2 mm, a left v.

TYPE LOCALITY : off Libreville, Gabon.

DESCRIPTION

Shell small, relatively solid, inflated, equivalve, inequilateral, subcircular, with the not very prominent beaks situated just before the vertical midline. Anterior end rounded, tapering and slightly inclined dorsally. Posterior part broad, ventral margin gently rounded. Posterodorsal slope with a very shallow, hardly visible radial depression. Anterior area not visibly marked. Lunule very small and inconspicuous, better developed in right than in left valve. Ligament small and narrow, deeply inset.

Exterior with very fine concentric threads at slightly irregular intervals, with smooth interspaces. Internal surface somewhat rough; muscle impressions well visible. Ventral extension of anterior adductor scar very short, broad and separated from the pallial line. Hinge without teeth.

Colour of valves uniform white.

DISTRIBUTION : Only known from Gabon.

MATERIAL EXAMINED : The type material.

BIOTOPE : Muddy sand, well offshore.

DERIVATIO NOMINIS : The name *subrostrata* characterizes the bluntly rostrate anterior end of the valves.

REMARKS

This species is characterized by its inequilateral and comparatively strong valves with a shorter and rostrate anterior end and a surface sculptured with concentric threads. This is not the juvenile of a larger species, because the concentric threads are too regular on the later parts towards the ventral margin, and the valves are too thick. A very young specimen of *A. cf. edentula* (L., 1758) (see below) also has concentric threads, but much denser, and its outline is different. *Anodontia subfragilis* (Dautzenberg, 1910) is more globose, nearly spheric, with smooth surface and it has a pale salmon or yellowish hue instead of being completely white. *Anodontia fragilis* (Philippi, 1836) from the Mediterranean is very similar to *A. subfragilis* and also frequently pale yellowish to whitish beige, but has a still thinner shell. The third West African species, *A. cf. edentula* (an Indo-Pacific species probably with disjunct distribution in West Africa), is much larger, more globose and less solid. Occasionally it has more closely set concentric threads in juveniles.

Family SOLECURTIDAE

Solecurtus afroccidentalis n. sp.

Solecurtus strigilatus : NICKLÈS, 1950 : 217-218; COSEL, 1982a : 24; 1982b : 44.

TYPE MATERIAL : Holotype MNHN, 59,8 × 24,7 mm, S of Cape Verga, Guinea, 9°59' N/14°26' W, sandy bottom, 15 m, 17.IV.1988, a live-collected specimen. Paratypes MNHN : 9°55,5' N/14°27' W, sand, 18 m, and adult sh.; 9°50' N/14°14' W, fine sand, 16 m, 1 juv. spm, 1 juv. v., all trawled R/V "André Nizéry", 16. and 17.IV.1988; paratype SMF : Cape Verga, 10°15' N/14°55' W, 27 m, a slightly chipped sh., trawled "André Nizéry", 22.X.1988, all leg. R. VON COSEL.

TYPE LOCALITY : Cape Verga, Guinea (Conakry).

DESCRIPTION

Shell moderately large, up to 72 mm, solid but not thick, equivalve, inequilateral, slender (length/width ratio 2,3-2,7 : 1), with beaks well before the vertical midline. Dorsal margin mostly slightly convex, ventral margin weakly convex, straight or even very faintly concave. Shell anteriorly and posteriorly widely gaping. Beaks only very slightly raised, anterior and posterior margin well rounded, posterior part often very weakly tapering, in some specimens, however, with parallel margins. Ligament short, occupying about 1/5 of the length of the postero-dorsal margin.

Exterior with strong concentric growth lines and very fine, more or less oblique, irregular, incised and partly curved lines running from the postero-dorsal margin towards the ventral margin, on the lower part of the surface often becoming obsolete and missing on the anterior part before the umbos. Antero-dorsal and postero-dorsal part with very faint radial striae. Pallial sinus very deep and oval, extending a little bit beyond the position of the vertical line crossing the beaks. Ventral limb of the pallial sinus very close to the ventral shell margin. Hinge with two cardinals in the right valve, the posterior being oblique. Left valve with a large anterior and a small posterior cardinal; no laterals.

Colour of valves salmon pinkish rose to very pale rose with two white radial rays, the first one nearly vertical or only slightly inclined towards posterior, the second one oblique and reaching the ventral margin behind the vertical midline. Inside whitish to pinkish, the radial rays showing through.

Animal : Bulbous brownish foot, with a much lighter surrounding keel. Siphons separate, with a huge common base and transverse constrictions around the tubes. Siphonal base light brownish with thin, darker transverse "lines" which appear when the siphons are retracted. Siphon tubes brown, also with darker transverse lines. Cruciform muscle attached to the valves where the white rays reach the ventral margin.

Selected measurements and length/width ratio

72,4 × 27,2 mm	S. Vicente, Cape Verde Is. (coll. ROLAN)	2,7 : 1
67,0 × 25,5 mm	Guinea (9°24' N/14°21' W, 40 m)	2,6 : 1
66,8 × 26,1 mm	Casamance, S-Sénégal	2,6 : 1
66,0 × 28,4 mm	S. Vicente	2,3 : 1
65,8 × 25,3 mm	Vridi, Côte d'Ivoire	2,6 : 1
62,6 × 25,1 mm	S. Vicente	2,4 : 1
60,6 × 25,8 mm	S. Vicente	2,3 : 1
59,8 × 24,7 mm	S of Cap Verga, Guinea (holotype)	2,4 : 1
57,8 × 23,2 mm	Pta. de Mussulo, Angola	2,5 : 1
55,8 × 22,5 mm	S. Vicente	2,5 : 1
54,8 × 22,5 mm	Ile Banié, Gabon	2,4 : 1
54,3 × 23,8 mm	S of Cape Verga (paratype MNHN)	2,3 : 1
53,4 × 20,8 mm	S. Vicente	2,6 : 1
53,0 × 22,2 mm	Cape Verga (paratype SMF)	2,4 : 1
53,0 × 21,4 mm	Casamance	2,5 : 1
51,0 × 22,4 mm	Ile Banié, Gabon	2,3 : 1
46,5 × 20,0 mm	Guinea (9°18' N/14°03' W, 26 m)	2,3 : 1
41,5 × 16,5 mm	S. Vicente	2,5 : 1
41,1 × 16,3 mm	Praia, Cape Verde I. (Madrid Mus.)	2,5 : 1
22,4 × 9,6 mm	Guinea (9°18' N/14°03' W)	2,3 : 1
21,2 × 9,3 mm	S of Cape Verga (paratype MNHN)	2,3 : 1
12,8 × 6,2 mm	S of Cape Verga (paratype MNHN)	2,1 : 1

DISTRIBUTION : Cape Verde Islands and Sénégal (Dakar) to Angola (Luanda).

MATERIAL EXAMINED : The type material; **Cape Verde Islands** : S. Vicente (no precise locality), 2 sh., MNHN; Baia Matiota, Mindelo, S. Vicente, on mixed sand with calcareous algae, 2-3 m, 3 v., leg. VON COSEL, 16.XII.1978. MNHN ex author's coll.; same locality, 1 sh., leg. and coll. ROLAN; Palmeira, Sal, 1 v., 20.VIII.1985; Praia, S. Tiago, 1 v., 21.VIII.1985, both Iberian Expedition to Cape Verde Islands, Madrid Museum. **Sénégal** : Baie de Gorée, 5-20 m, 2 v., leg. LEUNG TACK; Casamance (no precise locality), 10-20 m, 2 sh., leg. M. PIN, MNHN. **Guinea** : NW of Cape Verga, sand, 20 m, 1 spm., broken by the trawl, trawled R/V "André Nizéry", leg. VON COSEL, 23.X.1988; Continental shelf between Cape Verga and the border to Sierra Leone, several sh. and v. between 15 and 40 m, trawled "André Nizéry", leg. VON COSEL, IV.V. and IX.-X.1988, MNHN. **Sierra Leone** : 7°15,5' N/12°51' W, 64 m, 1 old and chipped v., "Calypso" Golfe de Guinée, sta. 10, 19.V.1956, MNHN. **Ivory Coast** : SW of Canal de Vridi, Abidjan, 45 m, 1 fresh sh., leg. MARCHE-MARCHAD, 23.II.1960, MNHN. **Gabon** : Ile Banié, N of Cap Esterias, on sand, thanatocoenosis, 2 sh., leg. P. BERNARD, MNHN. **Angola** : Palmeirinhas, 1 v.; Pta. de Mussulo, on beach, 1 v.; Baia de Corimba, 10-20 m, 2 v., all leg. GOFAS, MNHN.

BIOTOPE : Fine, medium and coarse sand, also with shell debris or calcareous algae, from about 3 m to ca. 45 m.

REMARKS

This West African species has up to now erroneously been cited as *Solecurtus strigilatus*. The SW-European and Mediterranean *S. strigilatus* (Linné, 1758) differs from the new species by having a slightly shorter and broader shell (length/width ratio 1,9-2,5 : 1) with the beaks situated closer to the vertical midline (ratio distance beaks-posterior end to total shell length in *S. strigilatus* 0,56-0,62 : 1, mean : 0,59, n = 14; in *S. afroccidentalis* 0,63-0,67 : 1, mean : 0,65, n = 14). *S. strigilatus* is more purple whereas *S. afroccidentalis* is more salmon-coloured. *S. scopula* (Turton, 1822) from Europe (England) to Cape Blanc, which lives in deeper water, is entirely white and has a shorter, broader and more square shell. The specimens of *S. afroccidentalis* from the Cape Verde Islands are usually paler than those from continental West Africa.

S. afroccidentalis is a strictly tropical species, which has its northern limit in the Cape Verde Islands and reaches the continent southwards only, at the southern part of the Cape Vert Peninsula (Baie de Gorée). This is not unusual for West African and capverdian species (COSEL, 1982b). It is a characteristic species of the vast sandy areas between 15 and 40 m on the continental shelf of Guinea. *S. strigilatus* has a known Atlantic distribution between the Bay of Setubal, Portugal (NOBRE, 1938-40) and the Strait of Gibraltar (M'Diq, material collected by S. GOFAS). I have not been able to check records further south along the northwest African coast (PASTEUR-HUMBERT, 1962; Agadir; DAUTZENBERG, 1910 : Port-Etienne, now Nouadhibou; LEWY, 1975 : N of Cape Barbas), which I consider unconfirmed and probably referring to other species. The specimen figured by ADANSON (1757) as "Le Golar" (pl. 19, fig. 2) is well the West African species and not *S. strigilatus*, however, since ADANSON it was never recognized being separate from *S. strigilatus*. NICKLÈS (1950) admitted that "*S. strigilatus*" "had not been refound in Sénégal since Adanson". The material recently collected by PIN and LEUNG TACK shows that *S. afroccidentalis* occurs from the Cape Vert Peninsula south, but not north of it. From these data it can be concluded that there is a gap between *S. strigilatus* and *S. afroccidentalis* extending from the Cape Vert peninsula northwards along Mauritania to somewhere along the coast of Morocco. Most probably these two very closely related species

evolved from a common ancestor. The populations may subsequently have separated, and the two species continued developing separately.

There are other examples of such discontinuities between two very closely related species, one in Europe-Mediterranean to Morocco or the Strait of Gibraltar, the other one in tropical West Africa, which have most probably derived from a common ancestor.

One example is the muricid subgenus *Bolinus*, with one almost strictly mediterranean species, *Murex (Bolinus) brandaris* Linné, 1758, with an Atlantic distribution from Setubal (Portugal) to Tanger (Morocco), and one West African species, *M. (B.) cornutus* Linné, 1758, from Canary Islands to Angola. Also in this case both species had most probably one common ancestor and are now separated by a hydrographical barrier, the zone of upwelling along the Moroccan and northern Mauritanian coast (for details see COSEL, 1982b, and TÜRKAY, 1982). In contrast to *Solecurntus*, the range of *M. (B.) cornutus* extends as far north as the Canary Islands.

Family VENERIDAE

Dosinia gabonensis n. sp.

Dosinia exoleta : NICKLÈS, 1952 : 151; FISCHER-PIETTE & DELMAS, 1967 : 58 (partim).

TYPE MATERIAL : Holotype MNHN, 54,4 × 51,6 × 25,7 mm, Ile Banié, N of Cap Esterias, Gabon, on sand with mud, 3-5 m, leg. P. RYALL, 1984, ex coll. P. BERNARD, Libreville. Paratypes : Ile Banié, fine sand with detritus, 5-7 m, 3 sh, 5 v., MNHN, 1 sh., 2 v., SMF, 2 v., IRSBN, 2 v., ZMC, 1 sh., 2 v., Natal Museum, all leg. P. BERNARD, III. and IV.1987.

TYPE LOCALITY : Ile Banié, north of Cap Esterias, Gabon.

DESCRIPTION

Shell fairly large, up to 60 mm, strong and solid, equivale, circular, with well defined and sharply delimited lunule and escutcheon. Beaks well in front of the vertical midline. Postero-dorsal margin in its first third behind the beaks raised, then moderately convex, ending with a more or less rounded corner to the posterior margin. Antero-dorsal margin in front of the lunule with a short and high curve. Ligament deeply inset, along slightly more than 1/2 to 2/3 of the length of the postero-dorsal margin. Lunule small, broad and heart-shaped, escutcheon narrow, lens-shaped and sunken.

Exterior with numerous, very fine and regular concentric ridges which become lamellate and somewhat irregular towards the antero-dorsal and postero-dorsal margin and end postero-dorsally in fine lamellate "spines" which sharply delimit the escutcheon. Growth stages faint, but clearly visible. Pallial sinus deep, triangular and pointing to the upper part of the anterior adductor scar. Hinge plate broad, hinge with three cardinals in each valve and a small anterior lateral knob in the left valve.

Colour of valves ivory-whitish, light beige to pale brownish, with curved radial brownish rays, lines or streaks, often interrupted by lighter growth zones and occasionally with zigzag markings. Subumbonal zone rarely with a light rosy hue. Lunule and escutcheon distinctly dark brown to reddish brown, escutcheon in its posterior part often with a white zone, sharply

delimited to the brown colour. Interior white, often with pale salmon, especially in the posterior half.

Selected measurements with length/width ratio

60,3 × 56,7 × 28,0 mm	Gabon (coll. POBEGUIN)	1,06 : 1
58,5 × 55,4 × 28,8 mm	Pt. Gentil, Gabon	1,06 : 1
58,4 × 54,8 × — mm	Pt. Gentil	1,07 : 1
54,4 × 53,0 × — mm	Pt. Gentil	1,03 : 1
54,4 × 51,6 × 25,7 mm	I. Banié, Gabon (holotype)	1,05 : 1
52,8 × 48,4 × — mm	W of Kouffin Island, Guinea	1,09 : 1
52,6 × 50,8 × — mm	I. Banié (paratype SMF)	1,04 : 1
50,9 × 45,6 × — mm	S. of Cape Verga, Guinea	1,1 : 1
50,2 × 47,0 × — mm	W of Kouffin Island	1,07 : 1
47,8 × 45,7 × 22,5 mm	I. Banié (paratype MNHN)	1,05 : 1
47,6 × 45,0 × 22,8 mm	I. Banié (paratype MNHN)	1,06 : 1
46,4 × 43,6 × 21,7 mm	I. Banié (paratype SMF)	1,06 : 1
45,7 × 41,7 × — mm	W of Kouffin Island	1,1 : 1
43,3 × 42,5 × — mm	I. Banié (paratype MNHN)	1,02 : 1
43,1 × 41,8 × 19,5 mm	I. Banié (paratype Natal Mus.)	1,03 : 1
41,7 × 39,8 × 19,4 mm	I. Banié (paratype) MNHN)	1,05 : 1
41,0 × 37,4 × — mm	W of Kouffin Island	1,1 : 1

DISTRIBUTION : Guinea (Ile Kouffin, 10°30' N) to Gabon (Ile Banié to Port Gentil), not yet found in the Congo.

MATERIAL EXAMINED : The type material; **Guinea :** 10°27' N/15°37,5' W, coarse sand with gravel, 39 m, 1 v., bottom grab, Sedigui sta. 742, 1 v., trawled, Sedigui sta B 4 CH; 10°27' N/15°43,5' W, coarse sand, 20 m, 2 v., trawled, Sedigui sta. B 3 CH; all R/V "André Nizéry", leg. VON COSEL, 25.-28.X.1988, 9°55,5' N/14°27' W, sand, 18 m, 1 v., trawled R/V "André Nizéry", leg. VON COSEL, 17.IV.1988, all MNHN. **Liberia :** 6°40' N/11°23' W, fine sand, 51 m, 1 slightly chipped old v., dredged, "Calypso" Golfe de Guinée sta. 12, 19.V.1956, MNHN. **Gabon :** Ile Banié, Corisco Bank, fine sand with detritus, 5-7 m, num. v., leg. P. BERNARD, III.IV.1987; Port Gentil, 1 sh., coll. CH. ROUX; 3 v., leg. P. BERNARD, 1985; "Côtes du Gabon" (no precise loc.), coll. POBEGUIN, 1900, all MNHN.

BIOTOPE : Fine sand with detritus, subtidally between 3 and 50 m (live specimens not yet known), in the northern part of the distribution area (Guinea) only found in deeper water (18-50 m).

DERIVATIO NOMINIS : The species is named after the Republic of Gabon, where the type locality is situated.

REMARKS

Dosinia gabonensis is well characterized by its peculiarly dark brown lunula and escutcheon in combination with the spine-like lamellae delimiting the deeply sunken escutcheon, a character rarely seen among the *Dosinias*. The only other large Eastern Atlantic *Dosinia*, *D. exoleta* (Linné, 1758) has a similar general outline and occasionally also a brownish lunule, but the escutcheon is shorter, very narrow, not sunken, not sharply delimited, generally not coloured, and the delimiting lamellae are absent. In *D. exoleta* the postero-dorsal margin is normally more rounded towards the posterior margin; in Atlantic specimens the concentric sculpture is more coarse, in mediterranean specimens it can be as fine as in *D. gabonensis*. In *D. exoleta* the radial rays and lines are more reddish brown and more frequently with zigzag pattern. A similar indopacific species is *D. troscheli* Lischke, 1873, from Japan, which has also a radial pattern, a similar sculpture and brownish lunula and escutcheon.

However, the escutcheon is broader, longer and less coloured or occasionally not coloured, and the shell is slightly longer in relation to height than *D. gabonensis*.

The new species occurs in Gabon with *D. orbigny* Dunker, 1845, which is smaller, thicker, higher and more globose. It is whitish with salmon or pale violet and lacks any pattern; lunule and escutcheon are not coloured. *D. orbigny* occurs from the Gulf of Guinea to Angola and inhabits fine sand in shallow water. Off Guinea it occurs together with *D. afra* (Gmelin, 1791), a species which is very close to the West European *D. lincta* (Pulteney, 1799) and differs from the new species in being smaller, having a finer sculpture and a less pronounced escutcheon. It is uniform dirty white.

D. gabonensis is, according to the few records, very rare north of Gabon. During a survey of the Guinean shelf in April-May and October-November 1988, where 804 bottom grab samplings, about 210 trawl hauls and about 170 dredge hauls with various types of gear were done, only five single valves were obtained on four stations. There is no record at all between Liberia and Gabon.

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Abbreviations used in the text

- IRSNB : Institut Royal des Sciences Naturelles de Belgique, Brussels, Belgium.
MNHN : Muséum national d'Histoire naturelle, Paris, France.
sh. : shell (both valves, empty).
SMF : Naturmuseum und Forschungsinstitut Senckenberg, Frankfurt/M., W-Germany.
spm. : specimen (live taken).
sta. : station.
v. : valve.
ZMC : Universitets Zoologisk Museum, Copenhagen, Denmark.

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PLATE I

- 1 — *Lucina leloeuffi* n. sp. : holotype MNHN, Cap des Palmes, Liberia, interior and exterior of left valve ($\times 1$).
- 2 — *Lucina leloeuffi* n. sp. : paratype MNHN, same locality, interior and exterior of left valve ($\times 1$).
- 3 — *Lucina leloeuffi* n. sp. : paratype II MNHN, same locality, interior and exterior of left valve ($\times 1$).
- 4 — *Anodontia subrostrata* n. sp. : holotype MNHN, off Libreville, Gabon, interior and exterior of left valve ($\times 4,5$).
- 5 — *Anodontia subrostrata* n. sp. : paratype MNHN, same locality, interior and exterior of right valve ($\times 4,5$).

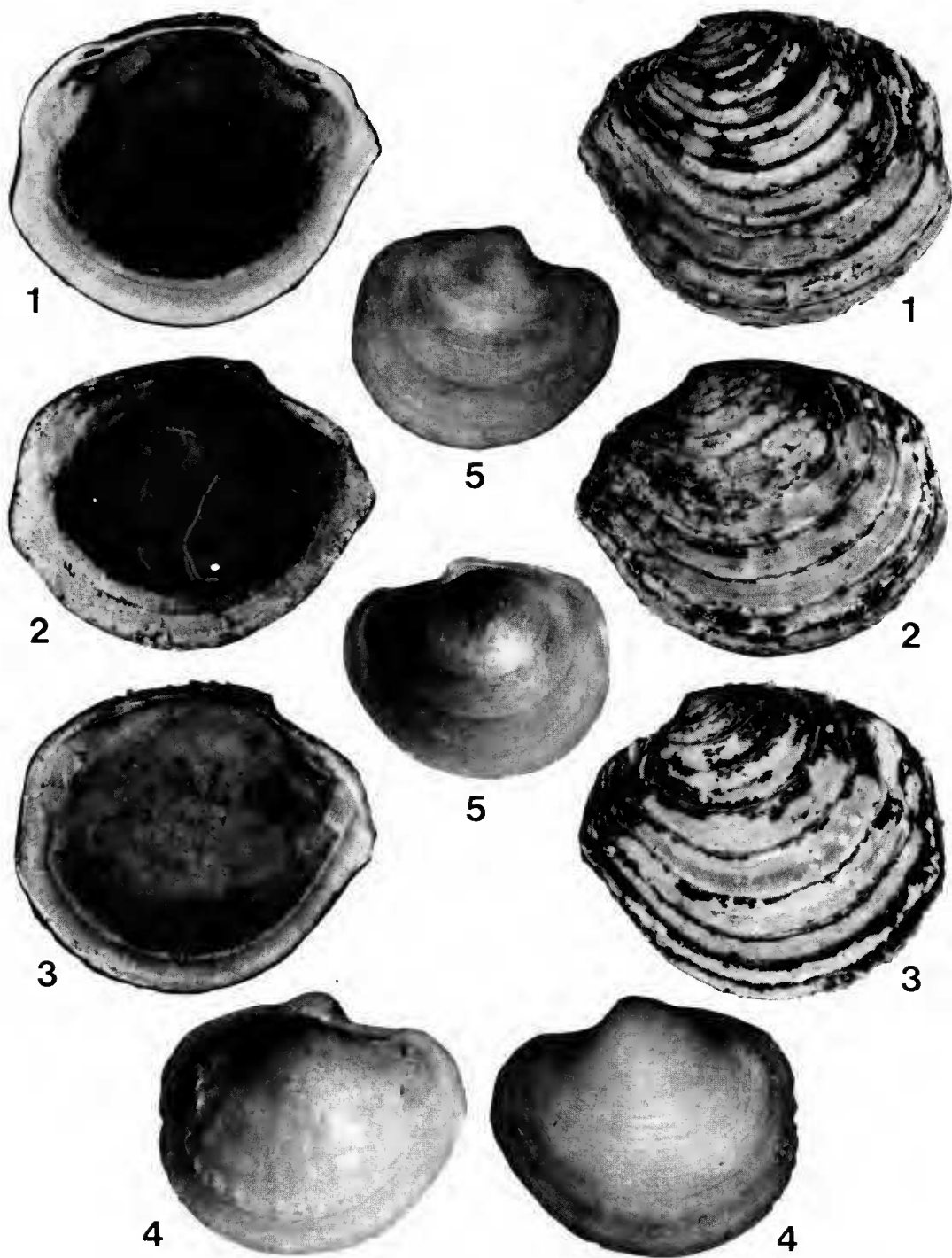
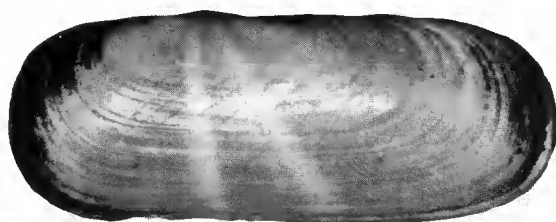
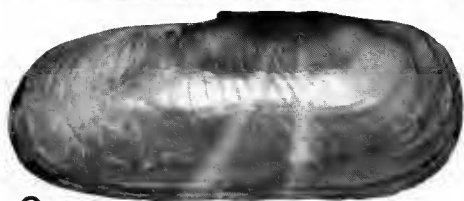
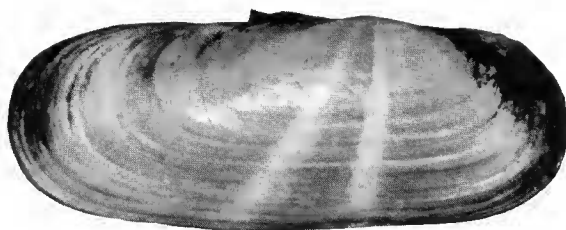
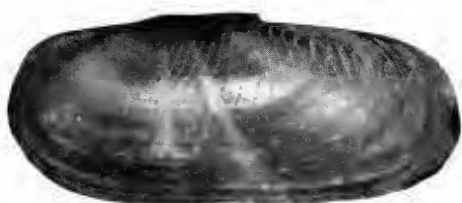


PLATE I

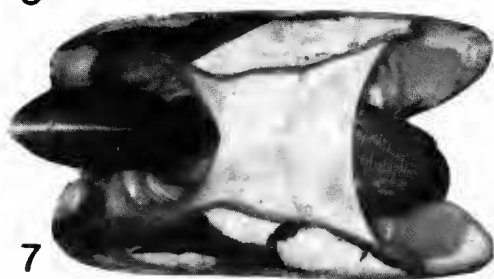
PLATE II (all $\times 1$)

- 6 — *Solecurtus afroccidentalis* n. sp. : holotype MNHN, S of Cape Verga, Guinea, exterior of both valves.
- 7 — *Solecurtus afroccidentalis* n. sp. : holotype MNHN, ventral view, showing cruciform muscle.
- 8 — *Solecurtus afroccidentalis* n. sp. : paratype MNHN, same locality, interior and exterior of right valve.
- 9 — *Solecurtus afroccidentalis* n. sp. : Mاتیوتا, Cape Verde Islands, coll. E. ROLAN, VIGO, exterior of both valves.
- 10 — *Solecurtus strigilatus* (Linné, 1758) : La Franqui, French Mediterranean coast, interior and exterior of right valve.

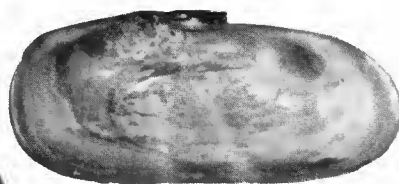
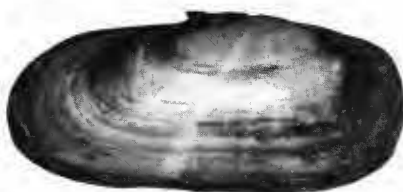


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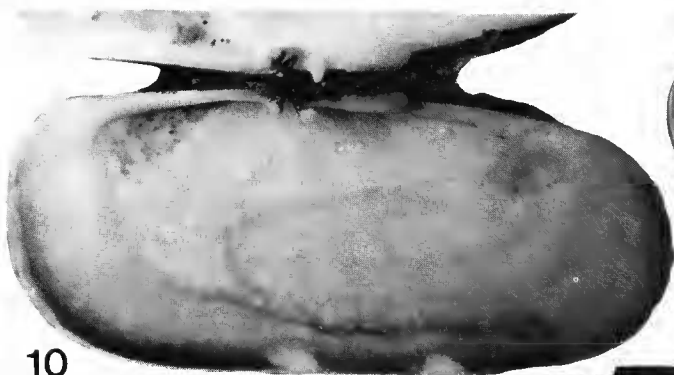
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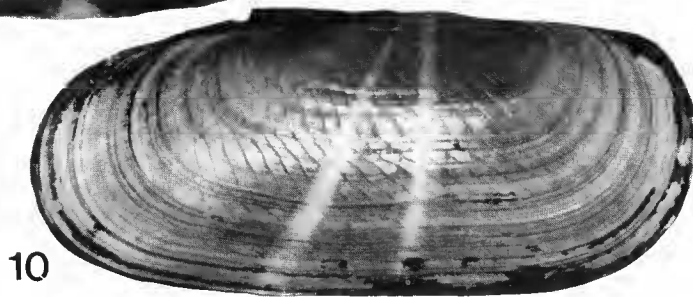
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PLATE II

PLATE III (all \times 1)

- 11 — *Dosinia gabonensis* n. sp. : holotype MNHN, Ile Banié, Gabon, interior, exterior and dorsal view.
- 12 — *Dosinia gabonensis* n. sp. : paratype SMF, same locality, exterior of right valve.
- 13 — *Dosinia gabonensis* n. sp. : paratype MNHN, same locality, exterior of both valves.

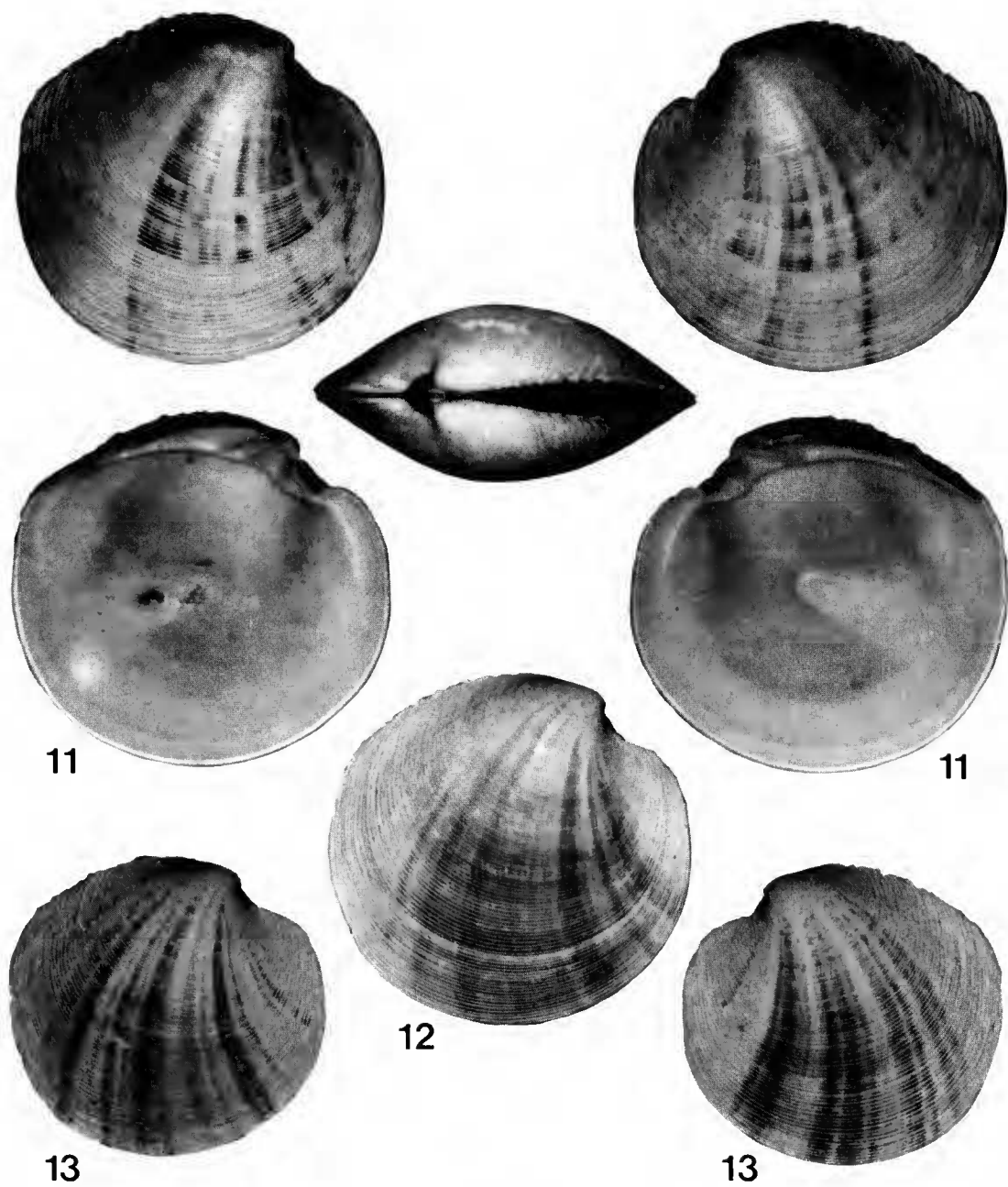
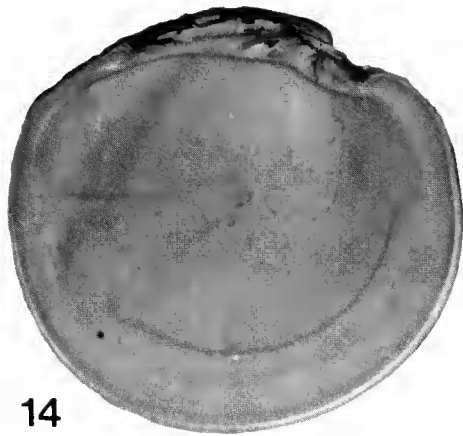
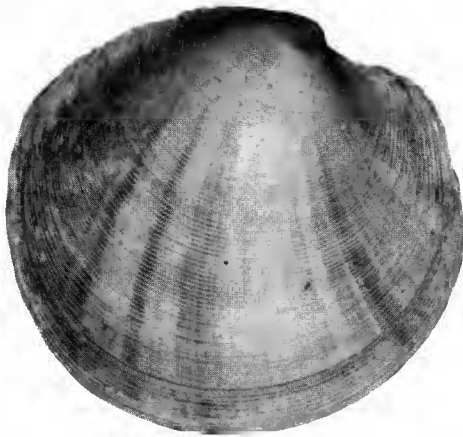


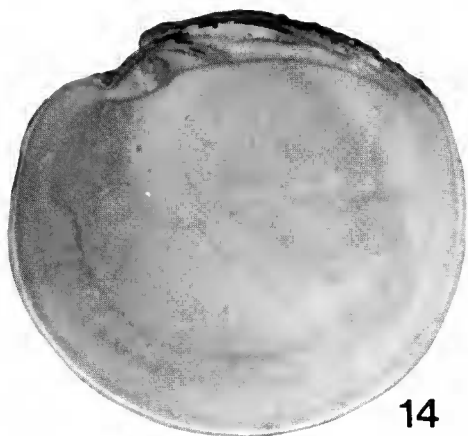
PLATE III

PLATE IV

14 — *Dosinia gabonensis* n. sp. : Gabon, coll. POBEGUIN, MNHN, interior and exterior ($\times 1$).



14



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PLATE IV